

NICHD SUPPORT OF ARTs

REPRODUCTIVE HEALTH:

BASIC RESEARCH

CLINICAL

BEHAVIORAL

EPIDEMIOLOGICAL

NICHD SUPPORT OF ARTs

CENTER FOR POPULATION RESEARCH

- REPRODUCTIVE SCIENCES BRANCH
- CONTRACEPTION AND REPRODUCTIVE HEALTH BRANCH
- DEMOGRAPHIC AND BEHAVIORAL SCIENCES BRANCH

REPRODUCTIVE SCIENCES BRANCH, NICHD

ALLEVIATION OF INFERTILITY; NOVEL CONTRACEPTIVE LEADS

- **REPRODUCTIVE ENDOCRINOLOGY**
- **GAMETOGENESIS, FERTILIZATION,
PREIMPLANTATION DEVELOPMENT,
IMPLANTATION**
- **REPRODUCTIVE DISEASES**

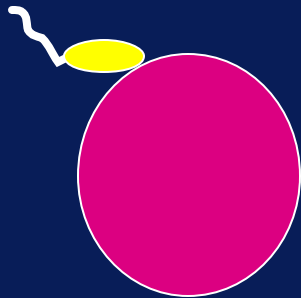
NICHD SUPPORT OF ARTs

FUNDING MECHANISMS:

- Investigator-initiated research projects (R01s, P01s, R03s, Small Business Grants)
- Requests for Applications (RFAs; PAs; RFPs)
- Training, Fellowships, Career Development Awards
- Workshops and Conferences

Human Embryo-Based Technologies

Egg

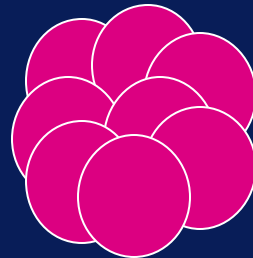


In Vitro Fertilization

ICSI

Cytoplasmic Transfer

8 - cell

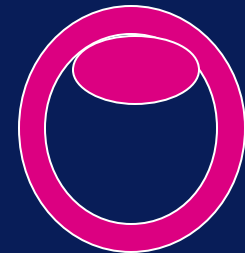


**Preimplantation
Genetic Diagnosis**

Twinning

Cryopreservation

Blastocyst



Embryo Culture

Embryo Transfer

**Embryonic Stem
Cells**

SPECIAL RSB INITIATIVES: EXAMPLES

- GENETICS AND PHYSIOLOGY OF HUMAN OOCYTES
- NONHUMAN IVF AND PREIMPLANTATION DEVELOPMENT
- MARKERS OF UTERINE RECEPTIVITY
- FEMALE HEALTH AND EGG QUALITY (2003)
- REPRODUCTIVE MEDICINE NETWORK
- SPECIALIZED COOPERATIVE RESEARCH CTRS
- INFERTILITY RESEARCH CENTERS

TRANSLATIONAL IMPACT ON HUMAN IVF

THE CULTURE CLUB - (1986-2000)

- COMPLETELY DEFINED MEDIA
- AMINO ACID SUPPLEMENTATION
- INFERIOR MEDIA-IMPRINTING DEFECTS
- DEVELOPMENT INTO BLASTOCYSTS
- SPEED OF CLEAVAGE
- EGG QUALITY

TRANSLATIONAL IMPACT ON HUMAN IVF

- RECOMBINANT GONADOTROPINS;
GnRH ANALOGS
- PROTOCOLS FOR OVULATION INDUCTION
- ICSI OFFSPRING FOLLOWED
- PREDICTORS OF IVF SUCCESS